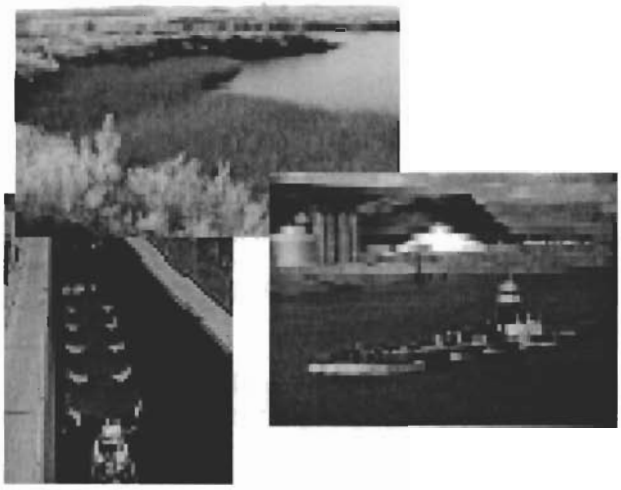
US Army Corps
of Engineers®
Walla Walla District

LOWER SNAKE AND CLEARWATER RIVER WINTER MAINTENANCE DREDGING

2004-2005



Summary

June 2004

US Army Corps
of Engineers®
Walla Walla District

Dear Citizens,

This document was developed to bring forward and summarize some of the critical information concerning the U.S. Army Corps of Engineers (Corps), Walla Walla District proposal to dredge areas within the lower Snake and Clearwater rivers during the winter of 2004-2005 to provide for navigation. The Corps operates and maintains four navigation locks and dams and a navigation channel within a 140-mile stretch of the lower Snake River: Ice Harbor, Lower Monumental, Little Goose, and Lower Granite. Sediment has accumulated in some locations to the point where it interferes with safe navigation. This proposal involves dredging an estimated 289,200 cubic yards of material. As in all our dredging operations, we try to use the dredged material in a beneficial manner and we plan to use this material to build some rearing and resting habitat for juvenile salmon in the Lower Granite Reservoir.

The last time the Corps dredged in the navigation channel was in the winter of 1998-99. Our surveys show the sediment build-up continues to increase, especially in areas near the confluence of the Snake and Clearwater rivers, resulting in impairments within the navigation system. The area below Clearwater River Mile 2 is filled in to the point that it is very difficult to turn barges or ships around without dragging on the river bottom. The navigation industry and the Coast Guard have documented grounding of vessels, in this area as well as others. Economic costs to the region are rising as the navigation industry tries to adapt to the current conditions. The increasing hazards are hindering the intended use of this Federal navigation system.

As stewards of the environment, we must recognize and address environmental concerns associated with Corps actions. Input from affected agencies, regional entities, tribes, and the public was vital to the development of this proposal. The Environmental Protection Agency was a cooperating agency and their insight and expertise was greatly appreciated in developing our most recent environmental analyses. They are continuing to assist on the development of a Programmatic Sediment Management Plan/Supplemental Environmental Impact Statement (PSMP/SEIS). Other Federal agencies, including the U.S. Fish and Wildlife Service and the National Marine Fisheries Service, also provided essential input.

The cumulative research and information concerning the navigation system represents years of knowledge, study, and experience. This report presents an overview of the technical, environmental, and other information concerning this proposal. The Corps considers the dredging in the winter of 2004-2005 to be of extreme importance to this region. We encourage you to take time to consider the data, analyses, and rationale found in our reports that led to this decision. Even with the possible uncertainties, this report and its associated documents contain the best information available to date.

I believe the summary and the referenced documentation express a sound rationale for conducting the 2004-2005 winter maintenance dredging.

Sincerely,

\signed\
LTC Edward Kertis
Walla Walla District Commander
Corps of Engineers

Introduction...

This document provides information on the maintenance dredging and disposal proposed for areas within the Lower Granite, Little Goose, and Ice Harbor reservoirs in the lower Snake and Clearwater rivers in Washington and Idaho during the winter of 2004-2005. The Corps has routinely used periodic dredging at several locations along the Snake and Columbia rivers to maintain the authorized navigation channel depth and flow conveyance, Corps-managed public recreation areas, and irrigation intakes for wildlife management areas. Maintaining the authorized navigation channel has been a standard operation and maintenance activity for the Corps since the projects were constructed.

The lower Snake River system include the four lock and dam projects (including the reservoirs and navigation channels) on the upper portion of the inland waterway. These projects are: Ice Harbor, Lower Monumental, Little Goose (all located on the Snake River), and Lower Granite (located on the lower Clearwater and Snake rivers). Each of these projects is authorized to provide navigation facilities including locks. The Corps' projects on the Snake and Clearwater rivers are multiple-use projects. Congress authorized the construction, operation, and maintenance to generally serve power production, navigation, water quality, fish and wildlife, recreation, and municipal and industrial water supply.

Defining the problem...

The Corps' project authorization states, "...the depth and width of the authorized channel in the Columbia-Snake River barge navigation project shall be established as fourteen feet and two hundred and fifty feet, respectively, at minimum regulated flow." Flood Control Act of 1962, PUB. L. NO. 87-874. Minimum regulated flow is generally known as minimum operating pool (MOP).

Currently, there are numerous locations within this area that are less than 14 feet in depth with some locations as shallow as 8-10 feet. The Corps has attempted to restore the authorized 14-foot depth on several occasions during the last few years, but has been unsuccessful. In July 2002, the Corps, with the Environmental Protection Agency (EPA) as a cooperating agency, completed the *2002 Dredged Material Management Plan/Environmental Impact Statement* (DMMP/EIS) for the lower Snake and Clearwater rivers. The DMMP/EIS addressed a proposed short-term maintenance dredging and disposal action to be completed in the winter of 2002-2003, as well as actions to occur during the course of the twenty-year period. The Corps was enjoined from performing the planned maintenance dredging and disposal activity on December 12, 2002. The Corps then withdrew the DMMP/EIS Record of Decision in April 2003, and decided to further evaluate alternatives for channel maintenance and supplement the programmatic long-term plan. Based on the outcome of the current litigation, annual appropriations, and availability of funds, the Corps will again attempt to implement actions as described in the 2004 Record of Consultation and Statement of Decision (2004 ROCASOD) to restore the previously authorized established navigation channel dimensions.

The accumulation of sediment has created problems both within the navigation channel and in some port and recreation areas. There are currently nine locations within the four Corps lower Snake River projects considered problem areas and targeted as needing greater water depths. These locations include areas within the navigation channel, two port areas, and recreation sites. Of most immediate need are three locations in the navigation channel and two port areas. It is these locations where the Corps hopes to dredge this winter in order to alleviate the increasing problem of sedimentation and hindrance to the navigation system.

What we plan to do....

We have taken a critical look at the current survey information and reduced the amount of dredging to be completed this winter to only those areas necessary for commercial navigation. The public notice for the 2004-2005 Winter Maintenance Dredging discussed all sites mentioned above; however, the Corps has decided, based on our analysis and public comments, to only dredge the areas that have a direct relationship to the navigation system. Even though dredging in the recreation and boat basins is needed, the most urgent need is the navigation system. The current locations proposed for dredging are listed in the following table:

Site to be Dredged and River Mile (RM)	Quantity to be Dredged (Cubic Yards)	Sediment Type (Calculated Based on Median Grain Size)
Federal Navigation Channel at Confluence of Snake and Clearwater Rivers (Snake RM 138 to Clearwater RM 2)	250,500	99% sand 1% silt/clay
Port of Clarkston (Snake RM 139)	9,600	91% sand 9% silt/clay
Port of Lewiston (Clearwater RM 1-1.5)	5,100	57% sand, 43% silt/clay
Lower Granite Navigation Lock Approach (Snake RM 107)	4,000	2-6 inch cobbles
Lower Monumental Navigation Lock Approach (Snake RM 41.5)	20,000	2-6 inch cobbles
Total	**289,200**	

Potential Disposal Location: Disposal of the dredged material is to be accomplished in-water in Lower Granite Reservoir at River Mile (RM) 116 near

Knoxway Canyon on the left bank of the Snake River in Washington. The Corps' beneficial use of this in-water disposal location accomplishes two goals: (1) provide a planting bench for the establishment of riparian habitat and (2) create shallow and mid-depth habitat for juvenile salmon.

How we plan to do this...

Dredging would be accomplished using mechanical methods, such as clamshell or dragline. Based on previous dredging activities, the method to be used would likely be clamshell for large open areas such as the main navigation channel and port areas. Material would be dredged from the river bottom and loaded onto barges for transport to the disposal site. It will likely be re-handled at the disposal site to form the planting surface for the woody riparian bench and the shallow water shelf.

Will what we plan to do harm the salmon...

We have built in sufficient precautions, including timing the work when few fish are present in the channel, and NOAA Fisheries stated in their most recent Biological Opinion[1] concerning the 2004-2005 dredging:

> After reviewing the current status of the subject ESUs, and factoring affects from the environmental baseline for the action area, the effects of the proposed action, and cumulative effects in the action area, it is NOAA Fisheries' opinion that the proposed action is not likely to jeopardize the continued existence of SRF chinook, SRSS chinook, or SR steelhead.

2004 BiOp, at 30. NOAA Fisheries also concluded that the proposed action is not likely to destroy or adversely modify designated critical habitat of Snake River fall and Snake River spring/summer chinook, stating:

> After reviewing the current condition of the critical habitat, factoring the effects on listed ESUs from the environmental baseline for the action area, the effects of the proposed action, and cumulative effects in the action area, it is NOAA Fisheries' opinion that the proposed action is not likely to destroy or adversely modify designated critical habitat of SRF chinook or SRSS chinook. The proposed action should not degrade baseline habitat functions necessary for the survival and

[1] NOAA Fisheries' *Endangered Species Act Section 7 Formal Consultation Biological Opinion and Magnuson-Steven Fishery Conservation and Management Act, Essential Fish Habitat Consultation, 2004-2005 Routine Maintenance Dredging in the Lower Snake River Reservoirs, Snake River Basin, Asotin, Garfield, Walla Walla, and Whitman Counties, Washington, Nez Perce County, Idaho* (2004 BiOp) was signed March 15, 2004 and concluded our Endangered Species Act (ESA) Section 7 consultation.

> recovery of any of the subject species. The action would cause transitory turbidity and would mobilize contaminants, but these effects would not affect long-term baseline habitat functions.

2004 BiOp, at 30.

The 2004 BiOp addresses the listed anadromous fish species: Snake River sockeye, Snake River fall chinook, Snake River spring and summer chinook, and the Snake River Basin steelhead. The Corps intends to comply with the Incidential Take Reasonable and Prudent Measures, and will also conduct the Conservation Recommendations to the extent practicable. The Corps plans to perform the dredging activities during the winter in-water work window, December 15, 2004 through March 1, 2005. The Incidental Take Statement with Reasonable and Prudent Measures focused on minimizing take from dredging operations, disposal operations, monitoring, and improving the available science regarding anthropogenic sedimentation in the lower Snake River. The link to the 2004 BiOp and the Corps' Biological Assessment can be found on the Walla Walla District website. The current opinion focuses only on the proposed one-year routine winter maintenance dredging activities planned for Winter 2004-2005.

Monitoring will be implemented before, during, and after dredging operations to reduce uncertainty and minimize any potential impacts to ESA-listed or candidate species. Specific monitoring actions will include pre-dredging salmon redd surveys within the navigation lock approaches, turbidity and sediment chemistry analysis (particularly ammonia) during dredging and disposal operations, and surveys to determine the presence of any rearing fall chinook salmon.

Because the lower Snake River has been designated as critical habitat for threatened Snake River fall chinook salmon, dredging the tailraces of Lower Granite and Lower Monumental dams will technically be altering critical habitat for spawning, rearing and migrating fall chinook salmon. However, the navigation lock approaches to be dredged have not been used for spawning due to low suitability. NOAA Fisheries' opinion concluded the proposed action is not likely to destroy or adversely modify designated critical habitat of SRF chinook or SRSS chinook. Monitoring will be conducted in these areas to ensure that there is no spawning taking place. In addition, it is expected that in-water disposal of dredged material would enhance critical rearing habitat for fall chinook salmon.

The Corps engaged in informal consultation with the United States Fish and Wildlife Service (USFWS) on these proposed activities in 2001, 2002 and 2003. In a letter dated August 22, 2001, the USFWS concurred that the proposed actions "may effect, but are not likely to adversely affect" the following listed species: bull trout, bald eagle and will have "no effect" on Ute ladies' tresses and Spalding's silene. In a letter dated June 15, 2004 the USFWS stated that their concurrence remains valid.

The relevant evaluations and documentation support the recommended 2004-2005 maintenance dredging with beneficial use of dredged material for improving

salmon rearing habitat. The Corps has determined that these actions, taken together, will meet the Corps' responsibilities under the ESA to avoid jeopardy to the listed anadromous species. Also, these actions may affect, but are not likely to adversely affect other species listed under the ESA (*i.e.*, bull trout and bald eagles) and will have no effect on Ute ladies' tresses and Spalding's silene.

Was the National Environmental Policy Act (NEPA) process completed. . .

NEPA requires agencies to take a hard look at environmental impacts of a proposed federal action to the human environment that includes evaluating compliance with applicable laws, executive orders, and relevant agreements. These laws include, but are not limited to: Archaeological Resources Protection Act; National Historic Preservation Act; Native American Graves Protection and Repatriation Act; Clean Air Act; Federal Water Pollution Control Act (Clean Water Act (CWA)); ESA; Federal Water Project Recreation Act; Fish and Wildlife Coordination Act; Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act); Migratory Bird Conservation Act; Coastal Zone Management Act; Safe Drinking Water Act; Flood Control Act of 1944; Magnuson-Stevens Fishery Conservation and Management Act; Wild and Scenic Rivers Act; Federal Pollution Control Acts; River and Harbors Acts; Executive Order 11988 (Floodplain Management Guidelines, May 24, 1977), Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994), other executive orders and Council on Environmental Quality (CEQ) Guidelines and Memorandum; and, other Federal, state, and local laws.

The Corps has evaluated the proposed dredging and disposal actions and considered the effects of those actions in regard to standards or requirements set forth in these and other applicable laws and regulations in making this decision. The selected action is in compliance with laws governing water, air, and land resources including the CWA, ESA, fish and wildlife requirements, and cultural resources requirements. This decision is also consistent with the Corps' Environmental Operating Principles.

As previously stated, the proposed 2004-2005 dredging is a routine maintenance action for existing projects. The original environmental impact statements (EISs) (discussed below) were prepared for these lock and dam projects and anticipated maintenance of the projects over their functional lifetime. Since the projects became operational, environmental impact studies, environmental assessments and other NEPA documents have been prepared addressing the navigation channel conditions and maintenance activities.

The evaluations and analysis under NEPA and other relevant documentation related to these activities include, but are not limited to, the following:

- *Final Environmental Impact Statement, Ice Harbor (O&M) Lock and Dam, Snake River, Washington, June 1979;*
- *Final Environmental Impact Statement, Lower Monumental Lock and Dam, Snake River, Washington, February 1976;*

- *Final Environmental Impact Statement, McNary Lock and Dam, Columbia River, Washington and Oregon, April 1976;*
- *Environmental Impact Statement, Little Goose Lock and Dam, Snake River, Washington, October 1974;*
- *Final Environmental Impact Statement, Lower Granite Project, Snake River, Washington, May 1975.*
- *1992 Columbia River Salmon Flow Improvement Measures Options Analysis Environmental Impact Statement (OA/EIS)* and its 1993 Supplement (SEIS;
- *Final Columbia River System Operation Review EIS (1995);*
- *Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement (FR/EIS), February 2002.*
- *2002 Dredged Material Management Plan/Environmental Impact Statement*
- *Supplemental Environmental Analysis for the Purposes of Dredging 2003-2004*

The 2004 ROCASOD references and incorporates the information contained in the previous NEPA documentation, as well as additional analysis and information. These documents adequately address the requirements of NEPA for the proposed 2004-2005 routine maintenance dredging. These documents set forth information on past dredging activities and the applicable NEPA evaluations. The Corps references current scientific information available in the 2002-2003 dredging activities analysis presented in the 2002 DMMP/EIS and the 2003-2004 dredging activities analysis information in the SEA-03/04, as they set forth the data and relevant analysis for, and are applicable to, the 2004-2005 dredging activities. The Corps has reduced the areas to be dredged from that originally proposed, and relevant issues regarding environmental concerns that relate to the proposed action or its impacts have been evaluated.

The Corps looked at the relationship of the proposed 2004-2005 dredging and the programmatic plan. It was determined that the 2004-2005 routine maintenance dredging action is necessary to provide a fully operational Federal navigational channel. Furthermore, this action does not preclude consideration in the programmatic plan of a number of alternatives that could be implemented in the long-term, such as sediment reduction or drawdown/flushing. This implementation of one-year routine maintenance dredging would not preclude the development and consideration of non-dredging measures in the PSMP/SEIS.

How does dredging affect water quality...

We looked at water quality during our Federal Water Pollution Control Act (Clean Water Act) 404(b)(1) evaluation and addressed the potential water quality impacts of proposed in-water discharges of dredged materials for dredging operations on the lower Snake River reservoirs, and associated port areas. The 404(b)(1) evaluation is consistent with and appropriately implements policies expressed in the Clean Water Act. As referenced in Corps regulations, the Corps conducts the 404 evaluation but does not issue 404 permits to itself on the activities under consideration.

The Corps has a Section 404(b)(1) evaluation for the 2004-2005 dredging. In the spring of 2003, the Corps took sediment samples from all proposed dredging locations and analyzed the samples for contaminants. The analysis followed the Lower Columbia River Dredged Material Evaluation Framework (DMEF) (1998), developed by the Corps, EPA, Oregon, and Washington, and the results indicated that any contaminants present in the samples gathered in the spring 2003 were at concentrations below DMEF screening levels and appropriate for unconfined in-water disposal of the dredged material. The Corps issued a new public notice for this action. The expected impacts to water quality are anticipated to be less than those identified in the 2002 DMMP/EIS and the SEA 03-04 discussing maintenance dredging, since the recreation sites and the boat basin are not part of the proposed action.

CWA 401 water quality certification for this action was requested from the State of Washington. No disposal will occur in Idaho so 401 certification is not required. However, the State of Idaho issued a short-term activity exemption. Washington State certification and the Idaho exemption are available to the public on-line at http://www.nww.usace.army.mil/dmmp/maintenance_dredging. The Walla Walla District's Monitoring Plan describes how the Corps will monitor water quality to ensure that its activities do not exceed state water quality standards outside of the "mixing zone" associated with the dredging and dredged material placement activities and is located on the website above.

What opportunities were given to Tribes regarding consultation...

Government-to-government consultation is an important part of the process leading to a Corps decision. The sovereign status of Native American tribes is recognized and the principles outlined in the Constitution, treaties, Federal statutes, regulations, and executive orders guide national policy towards Native American tribes. Working within a government-to-government relationship with Federally recognized tribes, agencies consult and coordinate, to the extent practicable and permitted by law, with tribal governments; assess the impact of agency activities on resources; ensure that tribal interests are considered before the activities are undertaken; and remove procedural impediments to working directly with tribal governments on activities that affect the rights of the tribes.

The development of this decision has included efforts to obtain tribal views of agency responsibilities or actions related to this study. The Corps has also reached out, through designated points of contact, to involve tribes in collaborative processes designed to facilitate information exchange and consideration of various viewpoints. Tribal members have participated or attended meetings where dredging was discussed.

The Corps sent letters, dated January 16, 2004, to the Confederated Tribes of the Colville Reservation, Nez Perce Tribe, Confederated Tribes of the Umatilla Indian Reservation, and the Confederated Tribes and Bands of the Yakama Indian Nation inquiring whether there was an interest in government-to-government consultation

regarding the proposed 2004-2005 maintenance dredging and disposal actions. Two tribes responded and requested government-to-government consultation.

In early February 2004, the Nez Perce Tribe requested government-to-government consultation, which was held on March 9, 2004. An additional request was received on May 18, 2004 asking for government-to-government consultation to discuss the 2004 BiOp and that consultation was held on June 8, 2004.

The Confederated Tribes of the Colville Reservation responded on April 8, 2004 requesting an information briefing, which was held April 22, 2004. An e-mail received on May 17, 2004, from the Colville's History/Archaeology Program Manager, Camille Pleasants, relaying a message from the Colville Business Council indicating " . . . that no further [government-to-government] consultation on this matter is needed."

Both tribes have indicated they still have concerns over aspects of the proposed project including such issues as sediment quality and potential contamination of the water column, and potential adverse impacts to ESA-listed species and their habitat. In addition, the Nez Perce Tribe has voiced strong concern about the cumulative impacts of the proposed project when considered in combination with other planned or on-going projects or operations within the Snake River system.

What historic properties were considered...

Based on both the proposed dredging and disposal actions and available information on known locations of historic properties, the Corps made a "no historic properties affected" determination for the 2004-2005 winter maintenance dredging pursuant to Section 106 of the National Historic Preservation Act. The Corps consulted with the State Historic Preservation Offices (SHPOs) of Washington and Idaho, Native American Tribes, and other interested parties. The Washington and Idaho SHPOs concurred with the Corps' determination (letters dated April 4, 2004 and April 16, 2004 respectively).

Related laws that were also considered in the preparation of this decision include, but are not limited to: The Antiquities Act of 1906; Historic Sites Act of 1935; Reservoir Salvage Act of 1960; Archeological and Historic Preservation Act of 1974; Archaeological Resources Protection Act; Native American Graves Protection and Repatriation Act; and, American Indian Religious Freedom Act.

Is it cost effective to maintain the navigation channel...

A cost analysis was completed which indicates the benefits realized by using the navigation system instead of alternate transportation modes exceed the cost of operating and maintaining the navigation features of the projects. The cost benefit ratio demonstrates it is economically justified to maintain the project.

How critical is the problem in the channel now. . .

Shoaling in the channel is critical in some locations. To date, there have been two groundings in the channel and the U.S. Coast Guard has been requested to establish navigation aids at eight problem areas. For example, Travis Coley of the Coast Guard noted that the Coast Guard is very concerned about safety issues during the dredging impasse. He stated, "Things are getting pretty dicey. We've not only had issues with towboaters carrying cargo, but with passenger vessels as well. It's a problem that is going to persist. We're simply trying to buy time until the dredging issue is settled in court. . ."

Based on the most recent channel condition survey (completed in August of 2003) and MOP reservoir elevations, available depths at some locations in the Federal navigation channel are reduced to as little as 8-10 feet. Because of the limited available depths in the channel, as well as the port berthing areas, some port facilities have been forced to operate at reduced capacity. Additional impacts to providing for the authorized navigation purpose include an increased safety risk; increased risk of damage to equipment; and lost efficiencies due to modified approach, loading, and unloading procedures. Impacts to commercial navigation continue, even though the operation of three lower Snake River projects has been adjusted to one foot above the minimum operating pool target range.

What can be done to alleviate the immediate need . . .

The Corps considered a number of measures and alternatives to restore authorized depths for navigation, including non-dredging measures, to address the immediate need to restore the authorized channel dimensions. Dredging is the only method that will definitely aid in the resolution of current sediment accumulation issues. Some of the measures and alternatives considered are discussed below.

One approach considered was dredging with traditional disposal practices. With this approach, the Corps would perform necessary dredging and would continue to dispose of dredged material in-water, using the same method used for the 1997-1998 dredging. Disposal of all dredged material would be in-water, in one of three types of in-water disposal areas: (1) shallow-water disposal; (2) mid-depth disposal; and, (3) deep-water disposal. Another approach was maintenance dredging with beneficial use of dredged material. The proposed beneficial use would accomplish two goals: (1) provide a planting bench for the establishment of riparian habitat; and (2) create shallow and mid-depth habitat for juvenile salmon. A no action approach is the Corps not performing routine maintenance dredging in 2004-2005. The navigation channel would remain partially filled in with sediment, and would continue to fill in as more inflowing sediment is deposited. This approach would not provide for navigation, an authorized project purpose.

The Corps also considered non-dredging measures, including sediment reduction and sediment flushing/drawdown. Although these measures may prove effective in addressing long-term sediment management issues in the navigation system, the Corps has determined that they will not be effective in meeting the

immediate need. The sediment reduction measures would not address the immediate need because it would not remove the sediments that have already accumulated in the navigation channel. Sediment flushing/drawdown will likely move some material but would not move enough of the sediments from problem areas to alleviate the interference with navigation and it could deposit them where they could cause other problems.

Light loading was suggested by some commentors as an alternative to dredging. However, light loading is actually an action taken by barge operators and others who rely on the navigation channel as a *consequence* of the diminishment depth of the navigation channel, rather than as an alternative to routine maintenance dredging. The Corps has no authority to direct barge owners/operators to light load.

Another option to alleviate the immediate need is to operate reservoirs above minimum operating pool (MOP) elevations. The NOAA Fisheries 2000 Biological Opinion calls for the Corps to operate the Snake River projects at MOP during the juvenile fish passage season. However, due to the critical nature of the shoaling, deviations from the MOP constraints were granted and some of the reservoirs have been operated at MOP+1. These deviations have been approved through coordination of the Technical Management Team (TMT)[2] for the last three years. Although these deviations have provided additional depth in the navigation channel, they cannot be guaranteed from year to year and based on increases in sedimentation cannot guarantee that safe navigation will continue. If these deviations were not approved for future years, the commercial navigation would be severely impacted if sediment were not removed.

Our recommendation on how to fix the problem...

The alternative or approach that best addresses the immediate need is to dredge the navigation channel to accommodate the authorized 14-foot depth, and specific port areas, using in-water disposal of the dredged material for beneficial uses. For the navigation channel to be utilized at its authorized depth it needs to have sediment removed from specific locations within the Federal navigation channel where depths are less than the authorized 14 feet at minimum operating pool (MOP) and where the need is the most critical (several are still a problem with the current operational deviation to MOP+1).

Implementation of this action will have minimal impacts to ESA-listed species consistent with 2004 BiOp and USFWS concurrence. As the NOAA Fisheries 2004 BiOp states the dredging and disposal activity will not jeopardize the listed species.

This alternative also holds the greatest potential environmental benefits due to the creation of up to estimated 2.5 acres of shallow water habitat for juvenile salmonids at Snake RM 116 in Lower Granite Reservoir. And, with the associated

[2] The Technical Management Team (TMT) is an inter-agency technical group established under the regional forum pursuant to the NMFS 2000 Federal Columbia River Power System Biological Opinion. The TMT is responsible for making recommendations on dam and reservoir operations.

development of a woody riparian area, it has the potential to restore additional valuable aquatic and terrestrial habitat to the system. The creation of shallow water habitat provides the greatest beneficial use of this dredged material. The beneficial use would create shoreline habitat in line with the goals of the Lower Snake River Fish and Wildlife Compensation Plan. It is the Corps' policy to manage dredged material associated with the construction or maintenance dredging of navigation projects in a manner that is consistent with sound engineering practice, meets applicable Federal environmental standards while seeking beneficial uses (whenever practicable) and the least costly approach.

This alternative is the most cost effective way to address the navigation problem with the most certainty and be confident that it will actually reduce the sediment in the areas that reduction is needed. By restoring the original authorized depths of the existing project, the negative impacts to the regional economy and the navigation industry (e.g., groundings, light loading), which have resulted from constraints of the current channel conditions, will be reduced. Maintenance dredging with the beneficial use of dredged material most completely and efficiently meets the project purpose and need of restoring the authorized depth of the Federal navigation channel and removing sediment from port areas.

The proposed dredging is anticipated to have limited, direct impact (less than 0.5% of the total surface area of the lower Snake River reservoirs affected). With other measures, such as flushing or drawdown, you have greater impact with less control. The proposed activity effectively manages dredged material from the reservoirs for the near-term and site-specific and independent of other actions. It effectively decreases safety concerns and risks to life and property.

In addition, this alternative restricts dredging to areas that have been previously dredged or disturbed and avoids impacts to cultural resources. The dredging will not disturb original river bottom and shoreline material. Water quality will be affected but this effect is anticipated to be localized and have minimal and short-term impacts.

Removal of sediment also contributes to the maintenance of the flow capacity in the Lewiston-Clarkston area and reduces the likelihood of flooding. The removal of sediment in the Lewiston-Clarkston area restores part of the lost freeboard. Freeboard provides a margin of safety against project levee failure by overtopping.

The implementation of a one-year dredging action to resolve the immediate concerns does not irretrievably commit resources that would preclude further investigation of other measures or alternatives during the development of the PSM/SEIS. This action does not preclude consideration of a number of alternatives for implementation in the long-term, such as sediment reduction or drawdown/flushing; therefore implementation of one-year routine maintenance dredging would not impact the development and consideration of non-dredging measures in the PSMP/SEIS.

What other factors were considered...

Emergency Dredging: If the Corps is not successful in conducting a dredging action this winter, the Corps may need to perform limited dredging on an emergency basis. An emergency, as defined in 33 CFR § 335.7 (Operation and Maintenance of Army Corps of Engineers Civil Works Projects Involving the Discharge of Dredged or Fill Material into Waters of the U.S. or Ocean Waters), is a situation that would result in an unacceptable hazard to life or navigation, a significant loss of property, or an immediate and unforeseen significant economic hardship if corrective action is not taken within a time period less than the normal time needed under standard procedures. There are several potential situations that could occur in the Snake and Columbia rivers that may require emergency dredging. The Corps would perform as much coordination as possible before initiating any emergency dredging. However, some coordination may be performed during the emergency dredging or after the emergency dredging is completed.

The Local Sediment Management Group: A Local Sediment Management Group (LSMG) was formed to provide agency and stakeholder input to the Corps on dredged material management. This group's formation and direction is consistent with the inter-agency National Dredging Team's guidance. The LSMG will continue to develop in accordance with policies and procedures currently evolving for the Regional Dredging Team (RDT), as referred in the April 26, 2002, policy letter jointly signed by Brigadier General David A. Fastabend (Corps of Engineers Northwest Division Commander) and L. John Iani (EPA Region 10 Administrator).

The LSMG is intended to play an important role in the implementation of the sediment management activities. Present LSMG attendance includes tribes and state and federal agency representatives. Additionally, public ports within the study area have been invited to participate in the LSMG, and other local entities with interest in the management of resources involved in dredged material management (*e.g.*, counties, municipalities, environmental groups, and transportation interests) were asked to participate on a regular basis. In addition, the LSMG has been identified as a forum to address regional sediment issues in the lower Snake River.

Public Involvement: An information meeting was held at the Walla Walla District on March 2, 2004. An update of the proposed 2004-2005 winter maintenance dredging was briefed. Presentations included an overview and channel conditions, economics, water quality, endangered species, and hydrology.

A Public Notice Number CENWW-PM-PD-E 03-01, December 17, 2003, asked for comments on the Water Quality Certification by January 17, 2004. These comments and responses are available at the Walla Walla District Office or on the District website.

Since this particular set of dredging actions and locations has been planned and rescheduled for the last three years, several public meetings, public notices, and comments have been published, received and evaluated. The DMMP/EIS comments received on the Final EIS and the SEA 03/04 are also available, along with the Corps' responses.

Cumulative Impacts: The cumulative effects relate to how other past and future actions, when considered in combination with the proposed dredging and disposal action, could cumulatively have significant impacts on environmental resources. The proposed 2004-2005 dredging and dredged material management activities are not anticipated to have substantial cumulative impacts on the human and natural environment. Cumulative impacts were considered in previous documents and were most recently discussed in the SEA and were considered for this action. Also, see Section 4.15, Cumulative Effects, of the DMMP/EIS for a specific discussion.

Other Factors: Several other factors including, but not limited to, regional acceptability, implementation impacts, short-term uses and long-term productivity, short-term and long-term effects, were considered in this decision-making process.

What happens now. . .

The Record of Consultation and Statement of Decision and supporting documentation will be included with a motion to dissolve the 2002 preliminary injunction. We will be asking the Court to review our decision, the work we've done and allow us to go forward with a dredging action this winter.

How does the Corps plan to manage sediment in the future...

The Corps is in the process of developing a PSMP/SEIS to address the future management of sediment accumulation. Dredging is just one of the many measures or alternatives to manage sediment in the Lower Snake River Project. A new analysis evaluation process has been developed and will assist the Corps in determining the best approach to dealing with sediment within the system and at individual locations. This will be explored and a draft PSMP/SEIS is planned for release this winter. For more information on this action see the Walla Walla District Website.